AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the claims

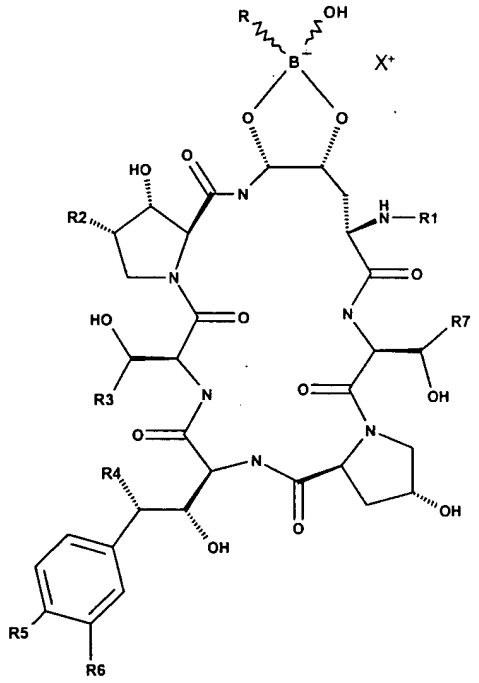
Claim 1 (currently amended): A reversible cyclic peptide adduct comprising a boric or boronic acid complexed with a cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety wherein said adduct is ionic in character and has a tetrahedral geometry at the boron atom, and is more water-soluble than said cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety.

Claim 2 (previously presented): The reversible adduct of Claim 1 wherein said boronic acid is selected from the group consisting of alkylboronic acids, heterocycloalkyl boronic acids, arylboronic acids, and heteroarylboronic acids.

Claim 3 (previously presented): The reversible adduct of Claim 1 wherein said boronic acid is selected from the group consisting of ethylboronic acid, propylboronic acid, butylboronic acid, tetrahydrofuranylboronic acid, phenylboronic acid, o-methylphenyl-boronic acid, *m*-aminophenylboronic acid, *p*-methylphenyl-boronic acid, *p*-carboxyphenylboronic acid, [*o*-(diisopropylamino)carbonyl] phenylboronic acid, *o*-formylphenylboronic acid, *m*-formylphenylboronic acid, *p*-methoxyphenylboronic acid, *p*-nitrophenylboronic acid, *p*-fluorophenylboronic acid, *p*-bromophenylboronic acid, *p*-trifluoromethylphenylboronic acid, 4,4'-diphenyldiboronic acid, 1-naphthylboronic acid, thiophene-2-boronic acid, thiophene-3-boronic acid, 2-formylthiophene-2-boronic acid, 5-chlorothiophene-2-boronic acid, 5-acetylthiophene-2-

boronic acid, benzo[b]thiophene-2-boronic acid, benzo[b]furan-2-boronic acid, indole-5-boronic acid.

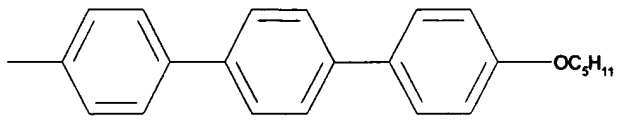
Claim 4 (previously presented): The reversible adduct of Claim 1 having the following structure



wherein R is a hydroxy, an alkoxy group, a phenoxy group, an alkyl group, a phenyl group, a thiol, a thioalkyl group, or a thiophenyl group; R^1 is -H or $-C(O)R^{1a}$ where R^{1a} is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group; R^2 is -H or $-CH_3$; R^3 is -H, $-CH_3$, $-CH_2CONH_2$ or $-CH_2CH_2NH_2$; R^4 is -H or -OH; R^5 is -OH, $-OPO_3H_2$, or $-OSO_3H$; R^6 is -H or $-OSO_3H$; R^7 is $-CH_3$; and X^+ is a cation.

Claim 5 (previously presented): The reversible adduct of Claim 4 wherein R is a *m*-aminophenyl group.

Claim 6 (previously presented): The reversible adduct of Claim 4 wherein R^{1a} has the following structure



Claim 7 (currently amended): A method for forming a reversible cyclic peptide adduct comprising the steps of

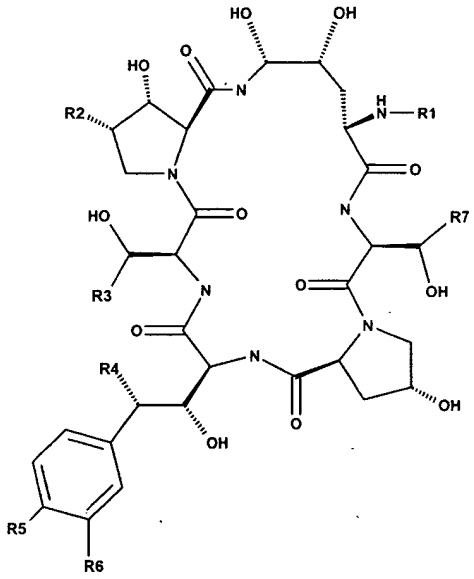
(i) providing an aqueous solution of a boric or boronic acid,

(ii) adding a cyclic Echinocandin peptide compound having at least one 1,2-*cis*-diol moiety to said aqueous solution, and

(iii) adjusting the pH of said aqueous solution to a value sufficient to effect complexation between said boric or boronic acid and said cyclic Echinocandin peptide compound under alkaline conditions;

wherein said adduct is ionic in character and has a tetrahedral geometry at the boron atom, and is more water-soluble than said cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety.

Claim 8 (previously presented): The method of Claim 7 wherein said cyclic Echinocandin peptide has the following structure



wherein R^1 is -H or -C(O)R^{1a} where R^{1a} is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group; R^2 is -H or -CH_3; R^3 is -H, -CH_3, -CH_2CONH_2 or -$CH_2CH_2NH_2$; R^4 is -H or -OH; R^5 is -OH, -OPO_3H_2, or -OSO_3H; R^6 is -H or -OSO_3H; and R^7 is –CH_3.

Claim 9 (previously presented): The method of Claim 7 wherein said boronic acid is selected from the group consisting of alkylboronic acids, heterocycloalkyl boronic acids, arylboronic acids, and heteroarylboronic acids.

Claim 10 (previously presented): The method of Claim 7 wherein said boronic acid is selected from the group consisting of ethylboronic acid, propylboronic acid, butylboronic acid, tetrahydrofuranylboronic acid, phenylboronic acid, o-methylphenyl-boronic acid, *m*-aminophenylboronic acid, *p*-methylphenyl-boronic acid, *p*-carboxyphenylboronic acid, [*o*-(diisopropylamino)carbonyl] phenylboronic acid, *o*-formylphenylboronic acid, *m*-

formylphenylboronic acid, *p*-methoxyphenylboronic acid, *p*-nitrophenylboronic acid, *p*-fluorophenylboronic acid, *p*-bromophenylboronic acid, *p*-trifluoromethylphenylboronic acid, 4,4'-diphenyldiboronic acid, 1-naphthylboronic acid, thiophene-2-boronic acid, thiophene-3-boronic acid, 2-formylthiophene-2-boronic acid, 5-chlorothiophene-2-boronic acid, 5-acetylthiophene-2-boronic acid, benzo[b]thiophene-2-boronic acid, benzo[b]furan-2-boronic acid, indole-5-boronic acid.

Claim 11 (previously presented): The method of Claim 7 wherein said aqueous solution is adjusted to a pH value between 7.5 and 9.5.

Claim 12 (currently amended): A method for purifying a cyclic Echinocandin peptide having a 1,2-*cis*-diol moiety comprising in the following order the steps of

(i) providing a crude mixture of a cyclic Echinocandin peptide having a least one 1,2-cis-diol functionality,

(ii) complexing said at least one 1,2-cis-diol functionality of said cyclic Echinocandin peptide with a boric or boronic acid to form a reversible adduct,

wherein said adduct is ionic in character and has a tetrahedral geometry at the boron atom, and is more water-soluble than said cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety,

(iii) solubilizing said reversible adduct in an aqueous solution,

(iv) removing any insoluble materials from said aqueous solution,

(v) acidifying said aqueous solution to a pH value equal to or less than the pK_a of said boric or boronic acid, and

(vi) recovering said cyclic Echinocandin peptide from said aqueous solution.

Claim 13 (currently amended): A method of purifying a 1,2-*cis*-diol cyclic Echinocandin peptide comprising in the following order the steps of

(a) providing a crude mixture of a cyclic Echinocandin peptide having a least one 1,2-*cis*-diol functionality,

(b) complexing said at least one 1,2-*cis*-diol functionality of said cyclic Echinocandin peptide with a boric or boronic acid to form a reversible adduct,

wherein said adduct is ionic in character and has a tetrahedral geometry at the boron atom, and is more water-soluble than said cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety,

(c) solubilizing said reversible adduct in an aqueous solution,

(d) concentrating said aqueous solution to form a concentrate,

(e) absorbing said concentrate onto a reverse-phase hydrophobic resin packed in a chromatography column,

(f) eluting with an aqueous solvent system, and

(g) combining effluent fractions containing said reversible adduct into a single effluent solution,

(h) acidifying said effluent solution to a pH value equal to or less than the pK_a of said boric or boronic acid to decomplex said reversible adduct, and

(i) recovering said cyclic Echinocandin peptide from said acidified effluent solution.

Claim 14 (currently amended): A pharmaceutical formulation comprising a reversible adduct comprising a complex of a boric or boronic acid with a cyclic Echinocandin peptide having a 1,2-*cis*-diol moiety,

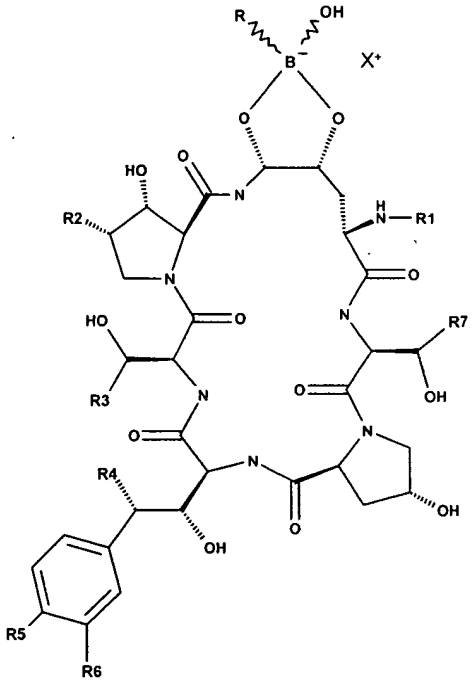
wherein said adduct is ionic in character and has a tetrahedral geometry at the boron atom, and is more water-soluble than said cyclic Echinocandin peptide having at least one 1,2-cis-diol moiety.

Claim 15 (previously presented): The pharmaceutical formulation of Claim 14 further comprising a pharmaceutically inert carrier.

Claim 16 (previously presented): The pharmaceutical formulation of Claim 15 wherein said inert carrier is water.

Claim 17 (previously presented): The pharmaceutical composition of Claim 14 further comprising a wetting agent, lubricating agent, emulsifier, suspending agent, preservative, sweetener, stabilizer, perfuming agent, flavoring agent or combinations thereof.

Claim 18 (previously presented): The pharmaceutical formulation of Claim 14 wherein said reversible adduct has the following structure



wherein R is a hydroxy, an alkoxy group, a phenoxy group, an alkyl group, a phenyl group, a thiol, a thioalkyl group, or a thiophenyl group; R^1 is -H or $-C(O)R^{1a}$ where R^{1a} is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group; R^2 is -H or $-CH_3$; R^3 is -H, $-CH_3$, $-CH_2CONH_2$ or $-CH_2CH_2NH_2$; R^4 is -H or -OH; R^5 is -OH, $-OPO_3H_2$, or $-OSO_3H$; R^6 is -H or $-OSO_3H$; R^7 is $-CH_3$; X^+ is a cation; and pharmaceutically acceptable hydrates, esters and salts thereof.

Claim 19 (previously presented): The pharmaceutical formulation of Claim 18 wherein R is a *m*-aminophenyl group.

Claim 20 (previously presented): A method for treating a fungal infection comprising in the following order the steps of

(a) providing a host in need of treatment for a fungal infection,

(b) administering an effective dose of a reversible adduct according to Claim 4, and

(c) decomplexing said reversible adduct to release a pharmaceutically active 1,2-*cis*-diol, cyclic peptide.

Claim 21 (previously presented): The method of Claim 20 wherein said reversible adduct is administered by means of an aqueous solution.

Claim 22 (previously presented): The method of Claim 20 wherein said reversible adduct is administered by means of an aqueous IV solution.